

Claims:

We claim:

1. A cleanser composition effective for maintaining eyelid hygiene, said cleanser composition being in the form of a controlled concentration foam suitable for direct application to an eyelid of a subject.
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2. The cleanser composition of claim 1, wherein the foam is generated in an environment that is substantially free from a sponge.
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3. The cleanser composition of claim 1, wherein said cleanser composition is specifically formulated for the treatment of an ocular disorder selected from the group consisting of inflammation of tear producing glands and inflammation of the lipid producing glands.
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4. The cleanser composition of claim 3, wherein the ocular disorder is selected from the group consisting of dysfunctioning of the tear film, inflammation of the eyelid dermis linked to Meibomian gland dysfunction (MGD), blepharitis, acne rosacea, seborrheic dermatitis, chalazion, hordeolum, sty and any combination thereof.
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5. The cleanser composition of claim 1, wherein the ocular disorder is dry eye.

6. The cleanser composition of claim 1, wherein the cleanser comprises the following components:

- 5 (a) an anti-inflammatory agent in the range of about 0.01 to 7.7 % by weight, selected from the group consisting of zwitterionic organic compound derivatives synthesized from piperazine-N' propane sulfonic acid;
- 10 (b) a pH-control agent and antioxidant agent in the range about 0.05-7.5 % by weight selected from the group consisting of a carboxylic acid derivative of propane;
- (c) a first tissue healing agent in the range of about 0.01 to 1 % by weight selected from the group consisting of allantoin and panthenol;
- 15 (d) a first water soluble surfactant present in the range of about 0.02-20 % by weight, said first surfactant selected from the group consisting of sodium lauryl sulfate, potassium lauryl phosphate polysorbate 60, potassium tridecyl phosphate polysorbate 60, potassium lauryl phosphate and potassium tridecyl phosphate;
- 20 (e) a second water soluble surfactant in the range of about 0.01 to 7.0 % by weight, selected from the group consisting of disodium lauroamphodiacetate and linoleamidopropyl PG-diammonium chloride phosphate;
- 25 (f) a skin conditioning and antibacterial agent comprising a phospholipid essential fatty acid in the range of about 0.1 to 5.0 % by weight;
- (g) a microbiological preservative present in the range of about 0.01-5.7 % by weight and selected from the group consisting of phenoxyethanol and diazolidinyl urea propylene glycol/methyl-propyl parabens; and,
- 30 (h) a viscosity regulating agent in the range of about 0.1 to 6 % by weight selected from one of the alkali metal salts of hydrochloric acid.

7. The cleanser composition of claim 6, wherein the active zwitterionic organic compound comprises aliphatic long chain esters synthesized from piperazine-N' propane sulfonic acid.
- 5 8. The cleanser composition of claim 6, wherein the active zwitterionic organic compound is a long chain aliphatic ester of N-(2-hydroxyl ethyl) piperazine N' (12-propane sulfonic acid) (HEPES).
9. The cleanser composition of claim 6, wherein the active zwitterionic organic
10 compound is an ester of HEPES selected from the group consisting of acetate ester, oleate ester, and linoleate ester.
10. The cleanser composition of claim 6, wherein the active zwitterionic organic compound is an ether analog of HEPES.
- 15 11. The cleanser composition of claim 6, wherein the active zwitterionic organic compound is a urethane derivative of HEPES.
12. The cleanser composition of claim 6, further comprising a solubilizer in the
20 range of about 0.01 to 5 % by weight,
13. The cleanser composition of claim 12, wherein said solubilizer comprises a polyoxyethylene derivative of a fatty acid ester of sorbitol.
- 25 14. The cleanser composition of claim 6, wherein the first surfactant comprises sodium lauryl sulfate in the range of about 0.3-20 % by weight.
15. The cleanser composition of claim 6, further comprising a second preservative selected from the group consisting of diazolidinyl urea propylene glycol, and methyl-
30 propyl paraben.

16. The cleanser composition of claim 6, wherein the pH range is about 5.5-6.5.
17. The cleanser composition of claim 6, further comprising a third surfactant of
5 sodium borage-amidopropyl hydroxyphosphate.
18. The cleanser composition of claim 6, wherein the pH control agent is citric acid.
- 10 19. A method of cleaning an eyelid of a subject comprising:
providing a dispensing apparatus containing a cleanser composition;
dispensing a controlled concentration of said cleanser composition
from said dispensing apparatus in the form of a transiently stable foam;
applying the foam to the eyelid; and
15 agitating the eyelid by localized and sustained massaging of said foam
onto the eyelid.
20. The method of claim 19, wherein the foam is generated in an environment that
is substantially free from a sponge.
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21. The method of claims 20, wherein the foam is dispensed onto a fingertip and
the fingertip is used to agitate the eyelid.
22. The method of claim 19, wherein the cleanser composition is formulated such
25 that upon application to the eyelid said cleanser composition does not substantially
damage the skin of the eyelid.

23. A method of treating ocular disorder in a subject comprising cleaning an eyelid of a subject, wherein the cleaning comprises the steps of:

providing a dispensing apparatus containing a cleanser composition;

dispensing a controlled concentration of said cleanser composition from said dispensing apparatus in the form of a transiently stable foam;

applying the foam to the eyelid; and

agitating the eyelid by localized and sustained massaging of said foam onto the eyelid.

24. The method of claim 23, wherein the treatment is performed on a subject in need of treatment.

25. The method of claim 23, wherein the ocular disorder is selected from the group consisting of dysfunctioning of the tear film, inflammation of the eyelid dermis linked to Meibomian gland dysfunction (MGD), blepharitis, acne rosacea, seborrheic dermatitis, chalazion, hordeolum, sty and any combination thereof.

26. The method of claim 25, wherein the ocular disorder is dry eye.

27. The method of claim 23, wherein said transiently stable foam is dispensed utilizing a device selected from the group consisting of a pump mechanism and a squeeze mechanism and wherein said device delivers said transiently stable foam to an applicator for application to the eyelid of the subject.

28. The method of claim 27, wherein the applicator is a fingertip.

29. The method of claim 23, wherein the controlled concentration foam is used in combination with a mechanically abrasive cleaning technique.

30. A kit for maintaining eyelid hygiene in a subject comprising:
- a dispenser that is capable of generating a transiently stable foam from a cleaning agent in an aqueous solution; and
 - instructions that set forth:
 - (1) concentration of said cleaning agent in said aqueous solution formulated to generate a transiently stable foam,
 - (2) how to use the dispenser to generate a transiently stable foam, and
 - (3) a method of application to maintain eyelid hygiene of a subject.
31. The kit of claim 30, further comprising a cleaning agent formulated to generate a transiently stable foam.
32. The kit of claim 31, wherein the cleaning agent is present in a pre-measured amount.
33. The kit of claim 30, further comprising an applicator.
34. The kit of claim 33, wherein the applicator is a sponge.
35. The kit of claim 30, wherein the dispenser is an airless foaming device.
36. The kit of claim 30, wherein the maintenance of eyelid hygiene comprises treatment of an ocular disorder in the subject selected from the group consisting of inflammation of tear producing glands and inflammation of the lipid producing glands.

37. The kit of claim 36, wherein the ocular disorder is selected from the group consisting of dysfunctioning of the tear film, inflammation of the eyelid dermis linked to Meibomian gland dysfunction (MGD), blepharitis, acne rosacea, seborrheic dermatitis, chalazion, hordeolum, sty and any combination thereof.
38. The kit of claim 30, wherein the ocular disorder is dry eye.
39. A kit for maintaining eyelid hygiene in a subject comprising:
- 10 a cleanser composition in a controlled concentration and formulated to generate a transiently stable foam; and
- a dispenser that is capable of generating a transiently stable foam from said cleanser composition formed of a cleaning agent in an aqueous solution.
- 15 40. The kit of claim 39, wherein the cleanser composition is present in said dispenser.
41. The kit of claim 39, wherein the dispenser is designed to deliver the foam in the form of a controlled concentration foam suitable for direct application to an eyelid
- 20 of a subject
42. The kit of claim 39, further comprising an applicator.
43. The kit of claim 42, wherein the applicator is a sponge.
- 25 44. The kit of claim 39, wherein the dispenser is an airless foaming device.

45. The kit of claim 39, wherein the maintenance of eyelid hygiene comprises treatment of an ocular disorder in the subject selected from the group consisting of inflammation of tear producing glands and inflammation of the lipid producing
5 glands.

46. The kit of claim 45, wherein the ocular disorder is selected from the group consisting of dysfunctioning of the tear film, inflammation of the eyelid dermis linked to Meibomian gland dysfunction (MGD), blepharitis, acne rosacea, seborrheic
10 dermatitis, chalazion, hordeolum, sty and any combination thereof.

47. The kit of claim 39, wherein the ocular disorder is dry eye.

48. The kit of claim 39 packaged with instructions for use in maintaining eyelid
15 hygiene.